

REMARKS

Claims 8 through 24 and 28 through 37 are pending in this application. Claims 11, 19, 28, 31 and 34 are the independent claims. Claims 1 through 7 and 25 through 27 have been cancelled without prejudice or disclaimer of the subject matter contained therein. New claims 31 through 37 have been added.

The Examiner has required a new title that is clearly indicative of the invention to which the claims are directed.

Claims 1 through 18 and 20 through 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Blomgren et al., U.S. Patent No. 6,334,183. However, Section 102 rejections are actually provided for claims 1 through 13 and 15 through 30. Accordingly, the Applicants will respond to the §102 rejection in relation to claims 1 through 13 and 15 through 30.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blomgren in view of Zuraski, Jr. et al., U.S. Patent Number 5,737,629.

Applicants have amended the claims to overcome the rejections and respectfully submit the claims are now allowable.

Specification

Applicants have amended the title as required by the Examiner. Applicants have also amended the specification to include a reference numeral for FIG. 5.

35 U.S.C. § 102(e) Rejections

Claims 8 through 13, 15 through 24, and 28 through 30 are Patentable Over the Prior Art

Claims 1 through 13 and 15 through 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Blomgren et al., U.S. Patent No. 6,334,183. Claims 8 through 13, 15 through 24, and 28 through 30 have been amended to overcome the rejection. Since claims 1 through 7 have been cancelled and claim 11 amended to include the limitations of claim 7, the rejection of claims 7 and 11 will be addressed together below.

Regarding claim 7 the Examiner states:

Blomgren has taught a method for sub-register data operations for executing an instruction, the method comprising: executing the instruction on a first register and a second register; and merging a result of the executed instruction with a plurality of high-order bits from the first register, the plurality of high-order bits being copied into high-order bit positions of a result register, and the result being placed into low-order bit positions of the result register (Blomgren abstract, figure 2, column 9 line 64 – column 10 line 10; as shown in figure 2, when the add BX,AX->AX instruction is executed, the unchanged portion of the register is passed though while the result of the lower portion of the registers is calculated.) (See Office Action, paragraph 11, bridging pages 3 and 4.)

Regarding claim 11, the Examiner states:

Blomgren has taught the method further comprising: ignoring a carryover of the result from the low-order bit positions of the result register to the high-order bit positions of the result register (Blomgren abstract, figure 2, column 9 line 64–column 10 line 10; since the bits that are not involved in the addition are filled by the source registers previous value, the carryover bit is left out of the register. (See Office Action, paragraph 15, page 5.)

Claim 11 has been amended to be in independent form to include the recitations of now-cancelled claim 7 and now recites, *inter alia*:

executing the instruction on a first register and a second register;
disabling a carryover of a result of the executed instruction from low-order bit positions of result register to the high-order bit positions of the result register;
and
merging the result of the executed instruction with a plurality of high-order bits from the first register, the plurality of high-order bits being copied into high-order bits from the first register, the plurality of high-order bits being copied into high-order bit positions of a result register, and the result being placed into the low-order bit positions of the result register.

The Blomgren et al. patent does not disclose or suggest “disabling a carryover of a result of the executed instruction from low-order bit position of the result register to high-order bit positions of the result register,” as recited in claim 11. Instead, in the Blomgren et al. patent, and as described by the Examiner, “the bits that are not involved in the addition are filled by the

source registers previous value, the carryover bit is left out of the register.” (See Office Action, paragraph 15, page 5.) In other words, the carryover bit is either ignored or, at best, overwritten by the source register’s previous value when it is passed to the result register. (See Blomgren et al., column 10, lines 2 through 10.) There is nothing in the Blomgren et al. patent that discloses or suggests “disabling a carryover of a result of the executed instruction from low-order bit positions of the result register to high-order bit positions of the result register,” as recited in claim 11. Therefore, the Section 102 rejection of claim 11 is believed to be overcome and claim 11, and claims 12, 13 and 15 through 18 that depend therefrom are believed to be allowable. Accordingly, Applicants respectfully request the Examiner withdraw the Section 102 rejection of claims 11 through 13 and 15 through 18.

Regarding claim 19, claim 19 has been amended to recite, *inter alia*:

the logic circuit including a carryover circuit to disable a carryover from the execution of the instruction to the unchanged portion of the destination register.

For at least those reasons given above for claim 11, the Section 102 rejection is believed to be overcome for claim 19, as well as claims 20 through 24 that depend therefrom. Therefore, Applicants respectfully submit that claim 19 is allowable. Accordingly, Applicants respectfully request that the Section 102 rejection of claims 19 through 24 be withdrawn.

Regarding independent claim 28, which has been amended into independent form to contain similar recitations as in claim 11, for at least those reasons given above for claim 11, the Section 102 rejection is believed to be overcome for claim 19, as well as claims 20 through 24 that depend therefrom. Therefore, Applicants respectfully submit that claim 28 is allowable. Accordingly, Applicants respectfully request that the Section 102 rejection of claims 28 through 30 be withdrawn.

Regarding independent claim 31, which is a machine-readable medium format claim containing similar recitations as claim 11, for at least those reasons given above for claim 11, the Section 102 rejection is believed to be overcome for claim 31, as well as claims 31 through 33 that depend therefrom. Therefore, Applicants respectfully submit that claim 31 is allowable.

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Accordingly, Applicants respectfully request that the Section 102 rejection of claims 31 through 33 be withdrawn.

Regarding independent claim 34, which is a machine-readable medium format claim containing similar recitations as claim 28, for at least those reasons given above for claims 11 and 28, the Section 102 rejection is believed to be overcome for claim 34, as well as claims 35 through 37 that depend therefrom. Therefore, Applicants respectfully submit that claim 34 is allowable. Accordingly, Applicants respectfully request that the Section 102 rejection of claims 34 through 37 be withdrawn.

In view of the foregoing, the Applicants respectfully submit that claims 8 through 13 and claims 15 through 24 and 28 through 37 are patentably distinguishable over the prior art of record.

Accordingly, Applicants believe that claims 8 through 13 and 15 through 24 and 28 through 37 are allowable over the applied art and respectfully request a notice of allowance to that effect be issued.

35 U.S.C. § 103(a) Rejections

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blomgren in view of Zuraski, Jr. et al., U.S. Patent Number 5,737,629.

Regarding claim 14, for at least those reasons given above for claim 11, the Section 103 rejection is believed to be overcome for claim 14. In addition, there is nothing in the Zuraski, Jr. et al. patent that makes up for the shortcomings in the Blomgren et al. patent. Therefore, Applicants respectfully submit that claim 14 is allowable. Accordingly, Applicants respectfully request that the Section 103 rejection of claim 14 be withdrawn.

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CONCLUSION

In view of the above remarks, Applicant respectfully submits that the present case is in condition for allowance and again requests that the Examiner issue a notice of allowance to that effect for all currently pending claims.

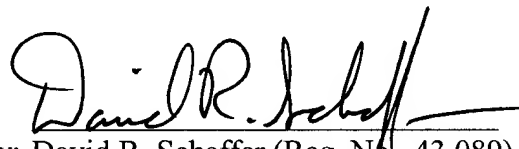
Applicants authorize the Commissioner to charge any fees determined to be due under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayment to Deposit Account No. 11-0600.

The Examiner is invited to contact the undersigned at (202) 220-4263 to discuss any matter concerning this application.

Respectfully submitted,

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